Notes on the Generic Group Symmoca Hbn. (Lep. Gelechiidae)

By L. A. Gozmány, Budapest

The fate of the generic group Symmoca Hbn, is in many ways similar to another one in the family Gelechiidae, to wit, Aristotelia Hbn. It was an almost "accepted" use of many authors, dealing with new species of the most primitive Gelechiid subfamily, the "Lecithocerinae", to classify them as "Symmoca", if the new taxa had superficial resemblances in pattern, coloration and general habitus to the best known Symmoca species (signella Hbn., albicanella Z., etc.), nothwithstanding the fact that the species thus designated shew distinct differences to be re-grouped in different genera. Professor Hering's ample remark on the Aristotelia aggregation, namely, that it is a "Hexenkessel", fits also the Symmoca group to a no lesser degree

When I recently happened to find two new species (Donaspastus pannonicus Gozm., and Eremica pales Gozm.) in Hungary belonging to the generally accepted view of what constitutes the genus Symmoca, and realizing at the same time that they have still to be described as belonging to new genera in the vicinity of the above genus, I felt the necessity of reviding the whole group. This was the more urgent as other workers were up to the same problem and erected new genera for their new species or were reluctant to do this and could

but relegate them to "Symmoca" as then and now perceived.

Consequently, I tried to gather all type specimens, at least from the larger Mediterranean area, and examine them. To cut a long story short, it appeared that the majority of the species constitute a well definable genus, namely that of Symmoca Hbn., but a large part of them formerly also attributed to this genus have to be put into newly erected genera. These genera are also well definable on the basis of their venation, whilst the genitalic structure justifies the general view that we are dealing with closely related aggregations. Namely, from the relatively complicated and full-blown genital structure of the generotype of Symmoca Hbn. (signella Hbn.), the relevant species show a gradually simplified (and possibly more primitive) basic structure, thereby linking them into a natural series. To be more particular, the gnathos, uncus, etc. formation is almost throughout the same, the sole difference being in the more or less developed state of the appendages of the valvae. Even the aedeagus show but small variation in size, form, and the number (or absence) of cornuti.

Since I have not been able to secure all types of the above area, I had to dismiss the possibility of a full revision. This is the more regrettable as it appeared that there are numerous synonyms (as was also to be expected), since there exist but one or two specimens extant of some of the species in the various collections, and the descriptions based on external characteristics alone are in some cases as good as nothing, because pattern and coloration show a wide variety of tint and intensity in this group. The genital structure of the males show, however, a singularly constant and specifically characteristical picture and so afford a sure identification. As, however, some of the types are females, and as there are no extant male specimens to be relegated indubitably to them, I had not been able to draw the male apparatus of some of the species. And, as this is also reciprocally true, I could not do the female organs on account of the lack of female specimens belonging unequivocally to the males of the species under discussion. I am therefore giving only the drawings of the male copulatory organs, hoping that one day we shall be able to determine their female counterparts in a later paper of a true revisional character.

The basic structure of the male Symmocoid organ is a large, hooked gnathos, a tapering, at its base triangular tegumen, folded lengthwise (as the half of a conical surface), a well developed valva rounded at its top, a usually slender aedeagus with cornuti. The most characteristical features are the variously shaped appendages of the valva, either on its dorsum or on its costa, or on both. Their form is absolutely specific and afford sure identification. The best way to prepare and examine the slide is to embed the organ laterally (never ventrally), since in this way the structure, shape and locality of the appendages jump to the eye at once; and also because longitudinal, etc. proportions related to the length of the valva or of the appendages to each other (or, for the sake of comparisons, with other slides) are best secured by this method. I have made the drawings without any attention to original proportions as to the size of the whole organ, to ensure a possibly uniform serial picture. The appendages are wholly blackened throughout the pictures for the sake of a greater emphasis. This dark coloration does not mean that the appendages are strongly chitinized and easily perceivable portions, — some of the costal appendages are indeed almost translucent and have to be carefully looked for (e. g. pallida Stgr.).

Wing pattern is very simple, showing 2 general kind of trends. One of them consists of some few dark spots or dots on a light base, more or less well defined, but also usually merging or fusing with each other which results in indistinct transversal lines; the second is composed of longitudinal streaks or lines of scales along the venation or the plical fold. In the case of some species, the intensity of the basic color is very varying, from an almost pure white to a very dark (greyish or brownish) tint (e. g. orphnella Rbl.), or, again, the extense of the pattern and the coloration of its elements show a rather wide latitude of variation (e. g. quadrijariella Mn.), or the case may be both (vetustella Zerny = atlanticella Lucas). This goes also to show that one cannot rely on pattern and coloration alone to unequivocally identify a specimen of this group, — indeed, the above high variational range caused most

of the synonymies treated below.

There is one major systematical alteration to be considered yet. Since G. Clarke removed the genus *Lecithocera* HS., — together with a host of congeners — from the *Gelechiidae* to reallocate them in his recently erected new family, the *Timyridae* (1955), he also removed the type genus of the subfamily. As the large majority of the remaining genera have what I called a Symmocoid type of male genital structure, and as the subfamily is now more homogenous than was before, I give it the new name **Symmocinae** subfam. n., characterized by, and based upon, the generic type *Symmoca* Hübner (generotype *signella* Hbn.).

I have also to express my sincere thanks for providing me with the necessary material and types to Prof. Hering, dr. Amsel, dr. Klimesch, dr. Schönmann, dr. Viette, dr. de Lucca, Prof. Mariani, dr. Zangheri, M. Patrizi, dr. Georghiu-Dej, and, last but not least, my special thanks go to dr. Tams for providing me with his excellent photographs and drawings of the types of Meyrick, Walsingham and Chrétien, which cannot be loaned out of the British Museum. It is a regrettable fact that I have not been able to secure the cooperation of the Antipa Museum in Bucarest to see and dissect the numerous types of Caradja, or those of Turati in Italy, whose collection, I am told, is inaccessible and may be slowly perishing. This is the more lamentable as both the above authors described not a few "Symmoca" species and there is a rather disquieting probability that the majority of them may be synonyms, as is the case with Caradja's trinacriella, a cotype specimen of which was cordially presented to me by dr. Georghiu-Dej, disposing of some cotype specimens of the Count. In the followings, I give (a probably arbitrary) order of sequence of the genera, with

all examined species composing them, with the synonyms drawn and the descriptions of

new taxa.

Symmoca Hübner 1825

(= Parasymmoca Rebel 1903, Asarista Meyrick 1935)

Head with loose hairs, labial palpi usually long and well developed, ascendent, only rarely porrect, second joint with thickening scales, usually white

at end, third joint long, pointed. Antennae $^3/_4$ of fore wings, of various structure, thin. Fore wings broadening toward apex, tip rounded. Venation: r_1 from before middle of cell, all other radials with lessening intervals, r_{4+5} on long stalk, r_5 to costa, medians of usually uniform intervals, buth cubitals present, straight, from one point at outer angle of cell. Hind wings almost as broad as fore wings, semi-oval, apex bluntly pointed. Venation: $rr + m_1$ on very short stalk, veins long, m_2 from middle of cell, m_3 and cu_1 conascent.

Subgenus Symmoca Hbn. 1825

Cubital veins of fore wings always strictly conascent, never removed from each other (Fig. 1: A).

Generotype: signella Hübner 1796. Male genital organ with strong but moderately long costal appendage, the dorsal one sharply broken (fig. 3:B).

Gen. prep: 68. Tyrolis, Ortler, 14. VII. leg. Krone.

calidella Walsingham 1905. Male organ with but dorsal appendage, similar to that of longipalpella Rbl. (fig. 4: H). Gen. prep. of type specimen by T a m s.

caliginella Mann 1867 (= achrestella Rebel 1889, gen. prep. 107, 1876, leg. Mann, Landro, lectoholotype). Male organ with two strong appendages, both from almost base of valva. The costal appendage of albicanella Z. originates almost from middle of valva and is much smaller. Gen. prep. 77, Bozen, leg. Krone. I could find no difference in the organ of a type specimen of achrestella Rebel (fig. 3: A).

canariensis Rebel 1906. The dorsal appendage of the male organ is unusually small, and in a position seldom met with: on the middle of dorsum. Gen. prep: 315, Canar. Ins. Palma St. Cruz, 17. IV. 1926, leg. I. Hering (fig. 4:C).

cinerariella Mann 1859. A true Symmoca and not a Borkhausenia. My specimens come partly from the Krone Collection, and Krone saw Mann's type specimens in Vienna. I Have not seen the types, but the species is unusually well defined and not to be mixed up with any other of the rather varying Symmoca species. The dorsal appendage of the male organ does not reach over the costa, as that of the similarly constructed latiusculella Stt. does. Gen. prep: 87. Corsica, Boccognanao, 1906, coll. Leonhard, coll. Krone; and 88. Aritzo, Sardegna, 1933. VI. 3. leg. Amsel. I received from Dr. Popes cu-Gorja male paratype of trinacriella Caradja, which is identical with cinerariella Mann (fig. 3: F).

? designella Herrch-Schäffer 1855. No reviser has ever seen the sole type

specimen which seems to be lost.

dodecatella Staudinger 1859. The serrated inner margin of the dorsal appendage in the male organ is unique in the whole group. Gen. prep: 92.

Granada m. Original, coll. Stgr. Holotype. (fig. 4:1).

homalodoxa Meyrick 1935. The dorsal appendage reaches to 1/3 of valva, turns sharply inward and ends in a sharp point. The costal appendage breaks away from costa at the height of the tip of the dorsal appendage, is of a moderate length, narrow, pointed. On this base, and by its patternless brownish-ochreous color not to be confused by any related species. Meyrick's genus (Asarista) cannot be separated from Symmzca Hbn. by any essential feature. Gen. prep. by Tams, made of the type, May, Sehouls, Morocco, leg. Rungs (Fig. 9: A).

longipalpella Rebel 1914. The structure of the dorsal appendage of the male organ is similar to that of calidella Wlsghm., but it is longer and has a

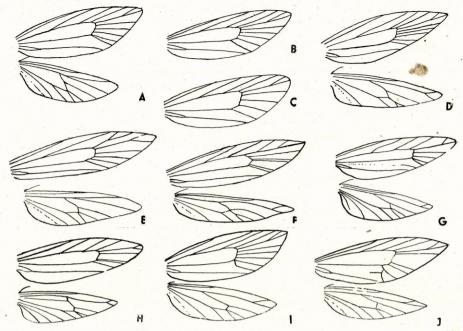


Fig. 1. — Wing venation. A: Symmoca Hbn., B: sg. Conquassata sg. n. (fore wing only), C: Aprominta gen. n. (fore wing only), D: Catasphalma gen. n., E: Parthenoptera gen. n., F: Acrosyntaxis gen. n., G: Eremica Wlsghm., H: Tenieta Amsel, I: Amselina gen. n., J: Hamartema gen. n.

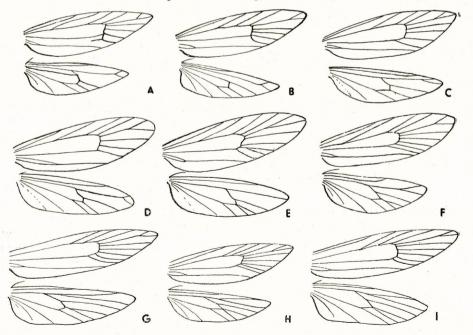


Fig. 2. — Wing venation. A: Donaspastus Gozm., B: Symmocoides Amsel, C: Telephirca gen. n., D: Neospastus gen. n., E: Thunatovena gen. n., F: Exorgana gen. n., G: Nestorellus Geras., H: Nastocerella Fletcher, I: Apiletria Led.

distinct costal tooth. Gen. prep. 121. Kingi, IV. 18. Aegypten, leg. Andres.

Lectoholotypus. (Fig. 4:G).

mobilella Zerny 1936. The recurrent dorsal appendage is sharply bent and juxtaposed to a small chitinized costal band. Gen. prep: 118. Marokko, Cr. Atlas, Goundafa, 1200 m., 1933, VI. 21—29. leg. Zerny. Lectoholotype. (fig: 4:A)

muricella Chrétien 1896. Its male genital organ differs from other related species with a similarly constructed dorsal appendage by the long, chitinized costal fold. Gen. prep. 95: Vernet, VII. 94. coll. C h r é t i e n, paratype. (fig. 4: F)

nigromaculella Ragonot 1875 (= tofosella Rebel 1893, gen. prep. 505, S. Portugal, Monchique, 400—900 m, VII. 29—30, 1938. leg. Zerny; 506, Aragonia, Albarracin, 21—24. VII. 1924, leg. Zerny; 507 et 508, Lanjaron, 16. leg. Stgr. = ponerias Walsingham 1905, gen. prep. by Tams, No. 7. Symmoca, made of the type). With regard to the male genital apparatus, it stands nearest to orphnella Rbl., and cedestiella Z., but they both have a much shorter costal appendage. Gen. prep:81. "Hispania, Prov. Madrid, Escorial, VIII. 1923." (fig. 3:E).

obliterata Walsingham 1905. Male genitalia distinguished by the lonely sublanceolate dorsal appendage, as also in *Kautziella* Rbl. Gen. prep. 134, ,,Hammam-es-Salahim, Algeria, 1904. IV. 8. leg. W l s g h m coll., A m s e l,'' topotype (fig. 3: D).

oenophila Staudinger & Wocke 1870. Its male genital organ stands nearest to that of pleostigmella Rbl., but the costal fold is differently molded, and the dorsal more deeply incised. Gen. prep. 78, "Hispania, Barcelona, 25. VII. 1925"

(Fig. 4: D).

orphnella Rebel 1893. Basic color exceedingly variable; an almost white specimen is in K1 i mesch's collection (gen. prep. 102, "Italia, Liguria, Capo di Noli, 10. VIII. 1944, leg. K1 i mesch'), in external appearance a typical cryptogamarum Mill. The male organ resembles that of uniformella Rbl., but its costal appendage is longer and more acute; angustipennis Rbl. has a much smaller one, whilst that of cedestiella Z. is differently placed. Gen. prep. 124, "Pegli, VII. 1889, 1(18)3.90. vidit Wocke", designated hereby as lectoholotype

(fig. 3: G).

petrogenes Walsingham 1907 (= hispanella Rebel 1917, gen. prep. 238, "Sierra d'Espuna, 09, leg. Korb" lectoholotype). Pattern and size rather variable, as witnessed by several misidentifications. A specimen of the Berlin Museum was labelled as "vitiosella Z." (gen. prep. 237, "Murcia, ex coll. Staudinger". NB: there is no vitiosella Z. in Spain!), whilst one other from the Amsel Collection was thought to be "alhambrella Wlsghm." (gen. prep. 137, "Sierra Alfacar, Hispania, 26. VI. leg. Bubacek"). The two appendages of the male organ are almost parallel and straight, not to be mixed up with any other species. Gen. prep. made by Tams, 6. Symmoca, made of the type (fig. 4: B).

pleostigmella Rebel 1917. Nearest to oenophila Stgr. & Wcke, but its dorsal appendage is straighter and the costal one differently formed. Gen. prep. 108, "Sierra d'Espuna, 09, leg. Korb", designated as lectoholotype (fig. 4: E).

pyrrhella Ragonot 1895 (= zeitunella Rebel 1902, gen. prep. 113, "Zeitun, Staudinger, 1902", lectoholotype). Its male genital organ is unique in the two costal lobes. Gen. prep. 3.013, made by Viette of the holotype (fig. 4:]).

signatella Herrich—Schäffer 1855 (= melitensis Amsel 1954, gen. prep.,,(GU) 1854'',made by Amsel of the holotype,,,Malta''). The male organ is characterized by the sharply broken dorsal appendage which reaches well over the costa, whilst the costal appendage originates at the base of the valva and is almost as long; that of vitiosella Z. is half as long, the dorsal appendage very sharp, the same as latiusculella Stt., profanella Zerny, attalica Gozm., whilst that of candidella Chrét. is larger and those of delicatellus Wlsghm., and luella Ld. do not reach over the costa. Gen. prep. 951, ,,Gravosa, Krone leg., 25. VII." (fig. 3: I).

sparsella Joannis 1891. This species was recurrently misidentified in literature, as, for instance, C a r a d j a's "sparsella" specimens of Beyrouth may be vitiosella Z., of Murcia petrogenes Wlsghm., of Athen attalica Gozm. Real sparsella Joann. specimens were found only in Asia Minor. Its male genital organ has a strongly bent and acute dorsal appendage, extending over the costa, with no costal one. Tectaphella Rbl., seems to have a larger appendage, but it may well be only an insular subspecies of sparsella Joann. Gen. prep. 314, "Syria, coll. Joannis, coll. Museum Paris, coll. Amsel, cotype"; and gen. prep. 86, "Ain Karim, Jerusalem, 18. V. 1930, leg. Amsel" (Fig. 3: J).

uniformella Rebel 1900. The top of the dorsal appendage is sharply broken, which, among other features, distinguishes it easily from the related species. Gen. prep. 109, "Cuenca, leg. Stgr.? 1900", designated as lectoholotype; also gen. prep. 79, "Hispania, Granada, Pueblo de don Fabrique, 14. V. 1927,

leg. Schmidt" (fig. 3:C).

vitiosella Zeller 1868. A much misidentified species; indeed, up to now, I know of only the single male type! The specimens of the Berlin Museum (gen. prep. 313, "Graecia, Aegina, leg. K r ü p e r") proved to belong to a new species (attalica Gozm.); R e b e l's specimen of Attica is also attalica Gozm; C a r a dja's specimens of Murcia are petrogenes Wlsghm., B o den heimer's specimen of Haifa (sec. Meyrick), the same as C a r a dja's sparsella Joann. of Beyrouth, may either be true sparsella specimens or — with good luck — vitiosella Z. The male genital organ can only be mixed up with that of signatella HS., but its costal appendage is relatively very short, and the dorsal one very sharp, extending even over the costal one. Gen. prep. 633, Symmoca, made by T a m s of the single type specimen (fig. 3: H).

Subgenus **Conquassata** sg. n. (= **Parasymmoca** Rebel 1903 nomen nudum). Characterized by the two cubital veins of the fore wing originating far from each other, cu_1 being at the lower angle of cell, cu_2 from further back. All other features as in *Symmoca* Hbn.

Subgenerotype: perobscurata sp. n.

perobscurata sp. n. Alar exp.: 17-19 mm. Head whitish, thorax and scapulas grey, labial palpi whitish, long, recurved, ascendent, second joint externally dark. Basic color of fore wings a dirty whitish, perceptible only in some places, since a rather dark grey suffusion extends over the whole wing. Two darker and indistinct, rather broad diagonal streaks reach from 1/3 and 2/3 of costa to dorsum, with a black dot in middle of fold, two other above it in cell at 1/4 and 3/4, and a third (sometimes double) at its end. A lighter and broken streak follows from costa to tornus, and an again darker apical field with blackish irroration on veins. A strong blackish line along termen. Ciliae grey with a white line. Hind wings grey. Female throughout darker, its pattern even more indistinct. Male genital structure (fig. 5 : A) characterized by two

large appendages on valva, the dorsal being slightly bent inwards, the costal straight, of 2/3 of costa; aedeagus blunt, bent, with two strong cornuti (gen.

prep. 128, holotype).

Externally it stands nearest to other large and darkly colored species of the group (a dark atricanella Rbl., or maybe a pleostigmella Rbl.), but is easily separated from all of them. Holotype male: "Hispania, Prov. Madrid, Escorial, VIII. 1923, leg. Schmidt"; paratype: same data, but IX 1923, as also the allotype female. The three type specimens are in the Collection of the Hungarian Natural History Museum.

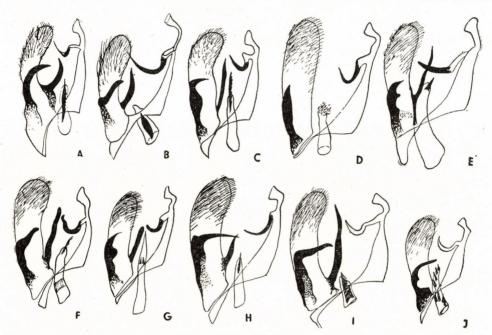


Fig. 3. — Male genital organs. A: Symmoca caliginella Mn., B· S. signella Hbn., C: S. uniformella Rbl., D: S. obliterata Wlsghm., E: S. nigromaculella Rag. (— tofosella Rbl., — ponerias Wlsghm.), F: S. cinerariella Mn. (— trinacriella Car.), G: S. orphnella Rbl., H: S. vitiosella Z., I: S. signatella HS. (— melitensis Amsel), J: S. sparsella Joann.

albicanella Zeller 1868. Male organ with a short and straight, medially placed costal appendage which separates it from caliginella Mn., and signella Hbn. Orphnella Rbl. also has a longer costal appendage, whilst those of angustipennis Rbl., and cedestiella Z. are otherwise construed. Gen. prep. 67, "Fiume,

an Mauermoos, Zucht, 22. V. leg. Krone" (Fig. 5:C).

alhambrella Walsingham 1911. The dorsal appendage of the male organ with a blunt external and a sharp internal lobe; separated from atricanella Rbl., by the presence of a costal appendage, whilst the heads of the dorsal appendages of cryptogamarum Mill., virginella Rbl., and sericiella Wlsghm. are differently constructed and have no or but very small costal appendages. Gen. prep. 8, Symmoca, made by Tams of the type (fig. 6: A).

atricanella Rebel 1906. The dorsal appendage has two sharp tips and no costal appendage which distinguishes it from the above cited related species;

Klimeschi sp. n. is smaller, the appendage leaning away from dorsum. Gen. prep. 114, "Gaitzaes, Taygetos, VI. 1902, leg. H oltz", designated as lecto-

holotype (fig. 5:G).

attalica sp. n. Alar exp.: 12—14 mm. Externally exceedingly similar to sparsella Joann., with the basal and two costal dark dots somewhat smaller. To be distinguished from sparsella Joann. (or petrogenes Wlsghm. = hispanella Rbl.) only by its genital apparatus, which has a long and slender costal appendage from base of costa (the dorsal appendage of petrogenes Wlsghm. is not bent). Gen. prep. 99 (fig. 5: F). Known up to now from Greece only. The "vitiosella Z." specimens of the Berlin Museum, originating from Greece (collected by K r ü p e r) are all attalica Gozm., the same as C a r a d j a's animals from Athen, or those of S t a u d i n g e r from "Graecia" and R e b e l's from "Attica". Holotype male: "Graecia, Attica, 96, leg. K r ü p e r", gen. prep. 99; paratype male: as above, and four other ones in the Zoologisches Museum, Berlin. Holotype and one paratype in the Collection of the Hungarian Natural History Museum.

costobscurella Amsel 1949. Distinguished by the very long and large dorsal appendage of the male organ. The same conformation in surprisingly recurrent in mediterraneus Gozm., which species belongs, however, to a widely differently venated genus (Donaspastus Gozm.), and, even more strikingly, in Nestorellus meyricki Geras. This latter has no similar external feature with costobscurella, whilst mediterraneus Gozm. is rather similar. Gen. prep. "(GU) 52la", made by Amsel of the holotype (fig. 5: I).

gypsomorpha Meyrick 1928. Male genital organ with two appendages, bent away from the valval margins. *Petrogenes* Wlsghm. has smaller ones which are almost straight, the costal one of *perobscurata* Gozm. is smaller, that of *molitor* Wlsghm. much longer. Gen. prep. 9125, made by Clarke of the

type (fig. 5: B).

latiusculella Stainton 1867. Its dorsal appendage is sharply bent and extends well over the costa, thereby differring from cinerariella Mn; signatella HS. has much longar costal appendage, whilst the dorsal one of vitiosella Z. is even more sharply bent and has a very acute tip; the dorsal one of profanella Zerny leans at once away from the dorsal margin, finally, the appendages of candidella Chrét. are both much longer. Gen. prep. 136, "Kirjat-Anawim, Jerusalem, 2. V. 1930, leg. A m s e l" (fig. 5: D).

libanicolella Zerny 1934. Its dorsal appendage is slightly bent and rather small, with a rounded, blunt tip. That of kalifella Amsel follows the dorsal margin. Gen. prep. 111, Nd. Libanon, Cedern bei Becharré, 1900 m., 24—30

VI. 1931, leg. Zerny, holotype (fig. 5: H).

profanella Zerny 1936. Its dorsal appendage leans soon away from the dorsum, is sharply bent and extends well over the costa. The peculiar shape of its inner margin distinguishes it from all related forms. Gen. prep. 115, Marokko, Gr. Atlas, Goundafa, 1200 m, 15—20. VI. 1933, leg. Zerny, lectoholotype (fig. 5: E).

Aprominta gen. n.

Labial palpi recurved, ascending or slightly porrect; antennae smooth. Head with hairs combed anteriorly. Wings small, rounded. Venation of fore wings: as in Symmoca Hbn, but m_3 and cu_1 coincident, from lower angle of cell, cu_2 far back. Hind wings as in Symmoca Hbn. (fig. 1: C).

Generotype: cryptogamarum Mill.

cryptogamarum Milliere 1872. Male gential organ distinguished by the dorsal appendage following the direction of the valva, its head drawn out into two sharp and recurved points. That of atricanella Rbl. is longer, with no costal lobe; that of virginella Rbl., larger; of sericiella Wlsghm., with a medially situated costal lobe. Gen. prep. 100, Alpes maritimes, leg. Constant, coll. Eppelsheim, coll. Krone (Fig. 6: D).

designatella Herrich—Schäffer 1855. Its dorsal appendage with a bent, long, sharp tip, not reaching costa. Those of scotinella Rbl., undecimpunctella Mn., and epenthetica Meyr. are not so sharply bent, with smaller tips. Gen. prep.

89, Croatia, Zengg, 8. VII. 1918, leg. Dobiasch (fig. 6: B).

syriacella Ragonot 1895. Its dorsal appendage is very long, recurved, terminating in the middle of the valva, its point aciculate. Its dorsal line more or less follows the dorsum of the valva. Not to be mixed up with any of the related species. Gen. prep. 3421 by P. Vi et te, original type, Hte. Syrie, Akbés (Fig.

9: D).

tectaphella Rebel 1916. Its male genital organ is like that of sparsella Joann., but the dorsal appendage is longer and sharper. Externally it is more indistinct and darker than the always distinct sparsella Joann. There is a possibility, however, that it is an insular subspecies of the other, though the coincidence of veins m₃ and cu₁ seems to warrant a too strong case of subspecicifation. Gen. prep. 116, Creta, Kristallenia, Ende VI, 1904. leg. Rebel, holotype (fig. 6: C).

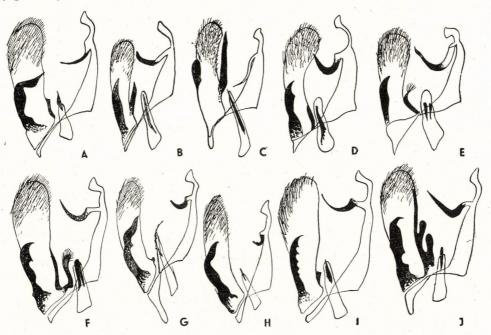


Fig. 4. — Male genital organs. A: Symmoca mobilella Zy., B: S. petrogenes Wlsghm. (— hispanella Rbl.), C: S. canariensis Rbl., D: S. oenophila Stgr. & Wcke., E: S. pleostigmella Rbl., F: S. muricella Chrét., G: S. longipalpella Rbl., H: S. calidella Wlsghm., I: S. dodecatella Stgr., J: S. pyrrhella Rag. (— zeitunella Rbl.).

Catasphalma gen. n.

Head haired loosely forward, labial palpi short, recurved, ascending, second joint with compact hairs, antennae smooth. Fore wing slowly tapering. Venation: r_1 from 1/3, all other veins far from it, more or less equidistant about end of cell, r_{4+5} on long stalk, r_5 to apex, lower angle of cell at cu_1 , cu_2 further back. Hind wing sublanceolate, $rr+m_1$ on very long stalk, m_2 nearer to the origin of the stalk of m_3+cu_1 than to that above; cell long, pointed. Resembling Eridachtha Meyr., but, among others, m_2 of hind wings present (fig. 1: D).

Generotype: Kautziella Rbl.

Kautziella Rebel 1935. The dorsal appendage of the male organ leans away from the dorsal margin, of a lanceolate shape. *Obliterata* Wlsghm. is straighter; musculina Stgr. narrower, of a different valval form. Gen. prep. 117, S. Gredos, Gorg. Pozas, Castilia, 1900 m, 9. VII. 1934, coll. Reisser, holotype (fig. 6: E).

Parthenoptera gen. n.

Head loosely haired; labial palpi short, recurved, ascending, second joint with compact hairs, third joint sharp, pointed. Fore wing tapering to a point. Venation: r_1 from 1/3, r_{2+3} from almost upper angle of cell, on a medium stalk, r_{4+5} on a longer stalk, r_5 to termen, m_1 and m_2 coincident, cubitals removed from each other. Hind wing as broad as fore wing, tapering. Venation: $rr + m_1$ on very short stalk, m_2 nearer to conascent m_3 and cu_1 than the aboves, cu_2 removed (as in Symmoca Hbn.). I know of no other genus on this subfamily with r_{2+3} on a stalk with also r_5 to the termen (fig. 1: E).

Generotype: virginella Rbl.

virginella Rebel 1912. The dorsal appendage of its male organ has a very broad head with two sharp points, narrowing at its neck. Atricanella Rbl. has longer points; cryptogamarum Mill, and sericiella Wlsghm. have costal appendages. Gen. prep. 119, Konia, leg. Korb, lectoholotype (fig. 6: F).

Acrosyntaxis gen. n.

Head loosely haired, with strong hairy tuft at base of antennae, labial palpi short, porrect, second joint with very short and sparse hairs, antennae minutely ciliated. Fore wing long, narrow, tapering. Venation: r_1 from 1/2, r_2 from middle between r_1 and upper angle of cell, r_3 on the common and long stalk of r_{4+5} , r_5 to apex; $m_{2,3}$ near each other, $cu_{1,2}$ also almost conascent from lower angle of cell. Hind wing narrow, sharply tapering. Venation: $rr + m_1$ on very long and sinuous stalk, m_2 arched toward the shortly stalked $m_3 + cu_1$, cell long, pointed (fig. 1: F). Near *Homaloxestis* Meyr., but r_5 of fore wings to apex, not to termen, and the genital structure is quite different (gnathos not fused to top of tegumen).

Generotype: angustipennis Rbl.

angustipennis Rebel 1926. Its male organ is characterized by a short, blunt and for removed appendage from the middle of the costal margin. *Pallida* Stgr.

has a differently shaped dorsal appendage, whilst that of *orphnella* Rbl. is larger. Gen. prep. 126, El Borg (Hariont), 2—5. V. 1921, coll. Alfieri, Aegyptom. Lectoholotype (Fig. 6:G.).

Eremica Walsingham 1904 (= Pantacordis Gozmány 1953)

Head sparsely haired, labial palpi short, porrect, second joint scarcely hairy. Fore wing slowly tapering. Venation: r_1 from before middle of cell, r_2 between r_3 and r_1 , r_3 near upper angle of cell, where r_{4+5} originates on a long stalk, r_5 to apex or just below it, m_1 near it, m_2 near to conascent m_3 and cu_1 at lower angle of cell, cubitals varying and instable, coincident in *pallida* Stgr., and *pales* Gozm.; a scarcely visible and atrophied rudiment in *cedestiella* Z.; and with a cross-bar between the coincident cubitals and analis in *kalifella* Amsel. Hind wing narrow, pointed. Venation: $rr + m_1$ on long stalk, cell ending between m_2 and conascent m_3 , cu_1 (fig. 1: G).

Generotype: saharae Oberthür 1888 (= saharae Walsingham 1904).

(Lithochroma Walsghm, is possibly an Eridachtha species).

saharae Oberthür 1888 (= saharae Walsingham. A rare coincidence that both authors gave the same name to the same species, and that O berthür did not perceive his species generic state and relegated it to Symmoca Hbn.) Dorsal appendage straight, its tip cut and pointed, follows the dorsal margin. I know of no other similarly constructed organ. Gen. prep. 96, coll. Chrétien, Mus. Paris; and another type from O berthür's Collection, prep. by Tams (fig. 6: I). Though the abdomen of Walsingham's single specimen is missing, there is no doubt about the synonymy.

cedestiella Zeller 1868 (=? paracedestiella Caradja 1930.) Its male organ characterized by the long and medially situated costal appendage, whilst the dorsal one is evenly arched exteriorly, with two indentations interiorly; thereby not be to confused with any other species. Gen. prep. 130, Sarepta, leg. C h r i s-

toph, coll. Staudinger, lectoholotype (fig. 6: J).

kalifella Amsel 1949. Its almost straight and blunt dorsal appendage resembles only that of *libanicolella* Zerny, which is, however, shorter, and leans away from the dorsal margin. Gen. prep. (GU) 522, paratype, made by

Amsel (fig. 7:E).

Klimeschi sp. n. Alar exp.: 11—13 mm. Not to be separated externally from *pallida* Stgr. Basic color a pale straw yellow, with a short dark streak in middle of plical fold, and two dark dots at 1/3 and at end of cell (this latter sometimes double). The pattern elements are wellnigh invisible. Hind wings whitish grey. The male genital organ differs from that of *pallida* Stgr., by lacking the small costal appendage, the dorsal being almost the same: a slightly arched, narrow and long finger with a U-like head (fig. 7: A). Holotype male: Sicilia, Mistretta, Mercuore, 700 m, 10—20, VI. 1952, leg. K 1 i m e s c h (gen. prep. 101); paratype male: Casteldaccia, Sicilia, 1932, VII. leg. Mariani (gen. prep. 105). Both in the Collection of the Hungarian Natural History Museum.

molitor Walsingham 1905. Its male organ is conspicuous by the two very long appendages which are longer than those of any other related species, including candidella Chrét., too. Their shape also distinguish it satisfactorily from other forms. Gen. prep. 4, Symmoca, made by T a m s of the type (fig. 7:G).

musculina Staudinger 1870. The shape of the valva at once distinguishes it from the other species. Also, I have found no cornuti in the aedeagus, which is also a rare occurrence. Gen. prep. 65, Graecia, Original, Staudinger, lectoholotype (fig. 7:F).

pales Gozmány 1954. Its dorsal appendage is very small with even margins, its head bent to a sharp tip, those of undecimpunctella Mn. and epenthetica Meyr. have a constricted "neck". Gen. prep. 82, Budakeszi, Hársbokorhegy, 9. VIII.

1952, leg. Kovács (fig. 6: H).

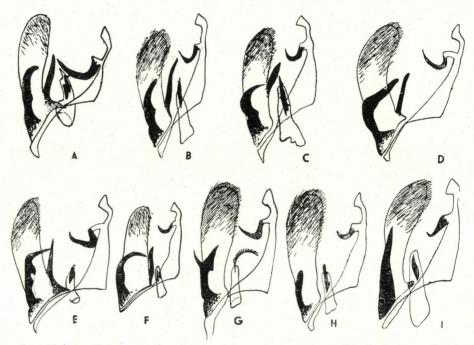


Fig. 5. — Male genital organs. A: Conquassata perobscurata sp. n., B: C. gypsomorpha Meyr, C: C. albicanella Z., D: C. latiusculella Stt., E: C. profanella Zy., F: C. attalica sp. n. G: C. atricanella Rbl., H: C. libanicolella Zy., I: C. costobscurella Amsel.

pallida Staudinger 1876 (= exiguella Chrétien 1915, gen. prep. 3009, made by Viette of the holotype; = minutella Chrétien 1922, gen. prep. 419, Chrétien, No. 3041, Coll. Chrétien, holotype). Its distinguishing feature — as against Klimeschi Gozm. — is the small costal appendage, sharp and pointed from the middle of costa. Gen. prep. 93, Sicilia, Kalchberg leg., Original, Coll. Stgr., lectoholotype; further: gen. prep. 104, Sicilia, Casteldaccia, 1922, VI. leg. Mariani (fig. 7: B).

scotinella Rebel 1916, a new combination (transferred from Borkhausenia Hbn.) — Its sharply pointed appendage, following the dorsal margin is larger than those of undecimpunctella Mn., and epenthetica Meyr. of a similar shape.

Gen. prep. 125, Crete, Perivallia, 5. VII (?), holotype (fig. 7 : D).

sericiella Walsingham 1904. Its bilobately pointed head of the dorsal appendage and the small, medially situated costal lobe distinguishes it from cryptogamarum Mill., and virginella Rbl., which have no costal lobes or but at the

base of the valva, whilst *atricanella* Rbl. has no lobe, or, indeed, that of *alhamb-rella* Wlsghm. is much longer. Gen. prep. 135, El Kantara, Algeria, 29. V. 1903, leg. Walsingham, No 89963, coll. Amsel, paratype (fig 7 : C).

Tenieta Amsel 1942.

Head loosely haired; labial palpi porrect, hairs of second joint appressed, third joint very acute; antennae filiform, 4/5, smooth. Fore wing evenly tapering, blunt. Venation: r_1 from middle of cell, r_3 from upper angle of cell, together with r_{4+5} on a very long stalk, r_5 to termen immediately below apex, $m_{2,3}$ conascent, cubitals coincident. Hind wing as broad as fore wing, slowly tapering. Venation: $rr + m_1$ on a very long stalk, m_2 near to conascent m_3 and cu_1 ; cell long, pointed (fig. 1: H).

Generotype: albidella Rbl.

albidella Rebel 1900. No male specimen known.

Amselina gen. n.

Head with loose hairs anteriorly; labial palpi porrect to slightly ascending, second joint sparsely haired; third joint acute, almost as long as second; antennae evenly and finely ciliated. Fore wings slowly tapering to a point. Venation: r_1 from 1/5 of cell, other radials near end of cell, r_{4+5} from upper angle, on a long stalk, r_5 strictly to apex, medians equidistant, cubitals from one point or somewhat separated from each other, cu_2 strongly arched, cu_1 only sometimes concave, both from about lower angle of cell. Hind wing slowly tapering, pointed. Venetion: $rr+m_1$ on a long stalk, m_1 to or just below apex, end of cell between m_2 and conascent m_3+cu_1 , cu_2 far removed; cell long. (fig. 1: I).

Generotype: olympi sp. n.

olympi sp. n. — Alar exp.: 16 mm. Antennae 4/5; labial palpi from porrect to ascending, third joint 2/3 as long as second, pointed, second roughly haired. Head, palpi, scapulae, thorax, abdomen and legs a medium fawn-brown. Basic color of fore wings greyish-white, with no discernible pattern but with a dense and uniform irroration of fawn-brown scales which almost form a double, vertical pair of spots at end of cell. Ciliae grey, with the brown scales protruding on them along termen.

Hind wings a light brownish grey, semitranslucent, ciliae grey, long. Differs from the allied *vetustella* Zerny by its patternless fore wings and coloration. Its male organ supports two large appendages of which the costal one is distinguished by its strongly protruding base, the dorsal by its blunt, rounded head (fig. 7: H), thereby differring from *vetustella* Zerny, and especially *molitor* Wlsghm. Holotype male: Bithynia, Bolu, 11—20. VI. 1934, leg. S c h w i n-g e n s c h u s s, Museum Vienna, gen. prep. 523. Type in the Naturhistorisches

Museum, Vienna.

oxybiella Milliere 1872. Its male organ distinguished by the highly recurved and pointed, sickle-shaped dorsal appendage, which is a form I have not met with in any of the species examined by me. A m s e l's oxybiella Mill. specimen, on which he erected the genus Symmocoides Ams., is a curiously aberrative specimen, which I have seen. It is indubitably an oxybiella Mill. (gen. prep. 950,

Muravera, Sardegna, 2. VI. 1936, leg. A m s e l), but its very distinctive pattern is almost non-existent, and its venation quite different from that of the normal oxybiella Mill., of which I have a large series from Spain, France and Italy, and which all show the normal venation of the genus Amselina Gozm., as described above. (The sole exception is the small stalk of $m_3 + cu_1$ on the hind wing of some Spanish animals). Accordingly, the genus Symmocoides Amsel cannot be based on this (teratological?) specimen, but must be restricted to similis Ams., as its new generotype. Gen. prep. 97, (also 98), Levens, Gallia mer., 10. VIII. 1926, leg. S c h m i d t (fig. 7: [).

leg. Schmidt (fig. 7: J).

vetustella Zerny 1936 (= atlanticella Lucas 1937 gen. prep. 3010, made
by Viette of the holotype). This seems to be a highly varying species. Either
the vetustella specimen of Zerny is very light and therefore its pattern too
distinctive, or Lucas's specimen of atlanticella is too dark so that the pattern
is almost indiscernible. There is no doubt as to the identity of the two species.
Its male organ is characterized by the very high and long dorsal appendage, and
the very anteriorly situated costal one. Only angustipennis Rbl., ot aegrella
Wlsghm. show a similar construction. Gen. prep. 122, Marokko, Gr. Atlas,
Goundafa, 1200 m, 21—29. VI. 1933, leg. Zerny, lectoholotype (fig. 7: l).

Hamartema gen. n.

Hairs loosely forward on head, labial palpi porrect, rather long, second joint scarcely hairy, third almost as long, acute; antennae smooth. Fore wing long, narrow, pointed. Venation: r_1 from middle of cell, r_3 near upper angle of

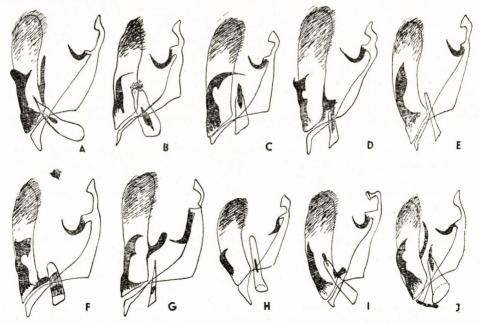


Fig. 6. — Male genital organs. A: Conquassata alhambrella Wlsghm., B: Aprominta designatella HS., C: A. Izctaphella Rbl., D: A. cryptogamarum Mill., E: Catasphalma Kautziella Rbl., F: Parthenoptera virginella Rbl., G: Acrosyntaxis angustipennis Rbl., H: Eremica pales Gozm., I: E. saharae Oberthür (= saharae Wlsghm.), J: E. cedestiella Z.

cell, where r_{4+5} on a long stalk originates, r_5 to apex, m_1 near it, m_2 far removed, near m_3 (where the lower angle of cell is) cu_1 far removed (!) from lower angle, cu_2 from its middle, connected (or fused) to the end of analis. Hind wing sublanceolate, pointed. Venation: $rr + m_1$ on long stalk, m_1 to apex, end of cell between m_2 and conascent $m_3 + cu_1$ (fig. 1: J).

Near Donaspastus Gozm., but the cubital structure of the fore wings is

different, m₂ of hind wings is present.

Generotype: marthae sp. n.

marthae sp. n. (= epileucella Rbl. in litt.) — Alar exp.: 12 mm. Head, palpi, scapulae and thorax white. Fore wings a patternless white, with a slight silvery shine, and some very few and small brownish scales around cell. Ciliae pure white. Hind wing grey, semitranslucent. Abdomen whitish-grey, with a

silvery shine. Legs whitish.

In external appearance nearest to *Donaspastus pannonicus* Gozm., but with no dark scales or dots at end of cell, wings more narrow, and shiny, not of a chalky color. Holotype female: S. Gredos, Hoyos, D. Esp. Cast(ilia), 1400 m, 3. VIII. 1936, coll. H. Reisser, Wien. Im Rebel's fist: *Symmoca epileucella* Rbl, Type, male (!). Type in the Collection of the Naturhistorisches Museum, Vienna.

Donaspastus Gozmány 1952.

Head small, hairs loosely forward, antennae in both sexes finely ciliated, labial palpi rather short (only relatively long), porrect, second joint slightly curved, with appressed scales, third joint ascending to porrect, pointed. Wings elongate-ovate, secondaries of the same breadth. Venation: r_1 from 1/4 of cell, other radials from lessening intervals, r_{4+5} from long stalk, r_5 to apex, medians from equidistant sources, cubitals coincident, fused to end of analis; hind wing: $rr + m_1$ on long stalk, m_2 missing, end of cell between m_3 and cu_1 , cu_2 far removed (fig. 2: A).

Generotype: pannonicus Gozm.

pannonicus Gozmány 1952. Its male organ characterized by the long and medially situated costal appendage, and the medium long pointed dorsal one. In this regard, only *orphnella* Rbl. has a resembling structure. Gen. prep. 54, Vörs, Hung. occ. 12. VIII. 1950, leg. Kaszab (fig. 8: E).

Bosellii Hartig 1941. There are no known male specimens. I have seen a paratype female, and this species indubitably belongs to Donaspastus Gozm.

epenthetica Meyrick 1931. It has only a pointed and rather small dorsal appendage, with a constricted neck. *Oenophila* Stgr. & Wcke. and *pleostigmella* Rbl. have costal appendages; that of *scotinella* Rbl. is longer; that of the nearest standing *undecimpunctellus* Mn. broader, its external arch stronger. Gen. prep. 9031, made by G. Clarke of the lectotype. I have two specimens, one from Hispania, prov. Madrid, Escorial, VII. 1924, leg. Schmidt; another from Hautes Alpes, L'Argentière-La Bessée, 8. VIII, 1925, leg.? (gen. prep. 23), (fig. 8: C). *Pales* Gozm. is also a near relation, but its aedeagus is twice as long, its valva broader.

mediterraneus sp. n. Alar exp.: 13 mm. Face and head a light ivory color, white around the eyes, antennae almost 1/1, brown, thorax a light ochreous red. Basic color of fore wings a light ivory, with fawn-red scales on base, ochreous scales along plical fold, coste and apical area with more fawn-colored scales (more or less along the veins), no regular pattern. The brownish and ochreous scales give

but a different tint to the ivory. Four strong, dark brown spots (of 10-12 scales each): one on the main radial vein at 1/3 of cell, one at 2/3 (upper angle) of cell, one between them both but nearer to the first just above the fold, finally one above tornus, yet not se near to the one at end of cell as to form a double spot. Ciliae light yellowish with some fawnish scales intruding on them. Hind wings a light, pearly grey, semitranslucent, ciliae light, yellowish grey. Labial palpi porrect, second joint brownish externally, its end whitish, third joint whitish with a small dark dot above.

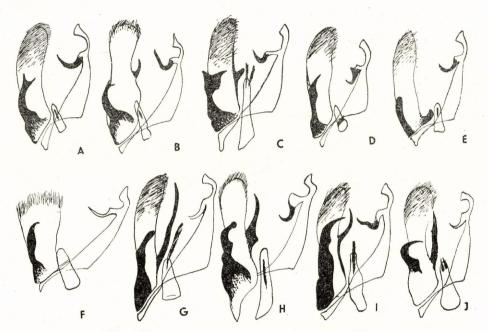


Fig. 7. — Male genital organs. A: Eremica Klimeschi sp. n., B: E. pallida Stgr. (= exiguella Chrét., = minutella Chrét.), C: E. sericiella Wlsghm., D: E. scotinella Rbl., E: E. kalifella Amsel, F: E. musculina Stgr., G: E. molitor Wlsghm., H: Amselina olympi sỹ. n., I: A. vetustella Zy. (= atlanticella Lucas), J: A. oxybiella Mill.

Nearest to costobscurella Amsel, but more colorful, also having a basal plical spot and no dark markings on costa at base. Its male genital organ (fig. 8:B) has a very characteristic and large dorsal appendage, leaning away from the dorsum in its middle. Costobscurella Ams. has an almost identical organ, but the appendage seems to be more erect and narrower. The two species cannot be identical, since — even if we allow for the high variation in pattern usual in the whole Symmocoid group — the two species belong to genera with widely different venation. Indeed, Nestorellus Meyricki Geras., is even more different externally from the above, and still has the very same genital construction. Holotype: Sicilia, Palermo, S. Martino di Scala, 1—12. VI. 1954, leg. K1imesch (gen. prep. 568, made by K1imesch of the type). Type in the Collection of Dr. J. K1imesch, Linz, Austria.

perpygmaeellus Walsingham 1901. Its male organ has a peculiarly bent and pointed dorsal organ, and also an unusual costal protuberance and thickening

of the membrane. It cannot be confused with any other species. Gen. prep. 5

Symmoca, made by T a m s of the type (fig. 8 : D).

undecimpunctellus Mann 1864. The sharply arched and spatulate head of the dorsal appendage in its male organ differentiates it genitally from epentheticus Meyr., with a more evenly arched dorsal appendage; whilst the aedeagus of pales Gozm. is twice as long. Gen. prep. 103, Sucurac D, Istria, 5. VI. 1924, leg. Novak (fig. 8: A).

Symmocoides Amsel 1938.

Labial palpi porrect to ascending, antennae almost 1/1. Fore wing slowly tapering to a point. Venation: r_1 before middle of cell, r_2 near it, r_3 further removed (!), from upper angle of cell, conascent with the long-stalked r_{4+5} , r_5 to apex, medians from equidistant points of origin, m_3 conascent with coincident and arched cubitals. Hind wing as broad as fore wing, tapering. Venation: $rr + m_1$ on a long stalk, m_1 just below apex, no connection between discoidal stalk of medians, end of cell between m_2 and coincident $m_3 + cu_1$, cu_2 far removed (fig. 2:B).

Since the generotype *oxybiella* Mill., was represented in A m s e l's collection by a highly aberrant (teratological?) specimen, the genus is restricted to its new generotype (relegated to it at the time of its description), *similis* Ams.

Oxybiella Mill. belongs to Amselina Gozm. (see above).

similis Amsel 1938. Its male organ is distinguished by the very long dorsal appendage, its head evenly arched, and its point just touching the costa. There is no other species of a similar construction in the material examined by me so far. Gen. prep. made by Amsel of S. similis f. albella Ams. (fig. 8: F).

Telephirca gen. n.

Head haired loosely forward; labial palpi recurved, ascending, short, second joint thickened by hairs, third thick, elevated; antennae thick, every second joint with ciliae. Fore wing slowly tapering. Venation: \mathbf{r}_1 from before middle, \mathbf{r}_2 nearer to \mathbf{r}_3 than \mathbf{r}_1 , \mathbf{r}_{4+5} on a long stalk from upper angle of cell, medians from equidistant points of origin, $\mathbf{m}_3+\mathbf{cu}_1$ coincident from lower angle of cell, cu_2 far removed. Hind wing as broad as second, slowly tapering, blunt, not pointed. Venation: sc to 3/4, rr + m_1 on long stalk, end of cell between m_2 and coincident $\mathbf{m}_3+\mathbf{cu}_1$, cu_2 far removed (fig. 2: C).

Generotype: quadrifariella Mann.

quadrifariella Mann 1855 (= ochreopicta Walsingham 1901), gen. prep. 139, Corte, Corsica, 13. VI. 1898, No. 83494, leg. Walsingham, 22/2, coll. Walsingham, coll. Amsel, paratype). The breadth of the fore wings of some specimens vary, as also the intensity and ochreous coloration of the pattern. Its male organ is distinguished by the small dorsal and the medially situated and rather long, pointed costal appendage, but mainly by the construction of the uncus + gnathos, which approaches that of the Dicranuche - Autosticha - Syrmadaula generic groups. Gen. prep. 524, Corsica, 9. VI. 1855, leg. Mann, designated as lectoholotype (fig. 8: E).

Neospastus gen. n.

Head with hairs lossely forward; labial palpi porrect, sacond joint with scarce hairs, third joint pointed; antennae 2/3, rather thick, ciliated. Fore wing slowly tapering to a blunt point. Venation: r_1 from before middle of cell, r_3 from upper angle of cell, r_{4+5} on a long stalk, from below upper angle of cell, r_5 just below apex, m_1 , the coincident m_{2+3} and the also coincident cubitals from equidistant sources. Hind wing as broad as second, slowly tapering. Venation: $rr + m_1$ on a long stalk, m_2 nearer to lower angle of cell than to above stalk, end

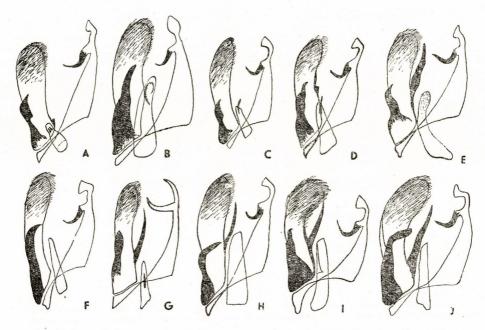


Fig. 8. — Male genital organs. A: Donaspastus undecimpunctellus Mn., B: D. mediterraneus sp. n., C: D. epenthetica Meyr., D: D. perpygmaeellus Wlsghm., E: D. pannonicus Gozm., F: Symmocoides similis Ams., G: Telephirca quadrifariella Mn. (= ochreopicta Wlsghm.), H: Neospastus delicatellus Wlsghm., I: Thanatovena aegrella Wlsghm., J: Nastocerella candidella Chrét.

of cell between m_2 and cu_1 , m_3 obsolete or coincident with cu_1 cu_2 removed (fig. 2: D).

Generotype: delicatellus Wisghm.

delicatellus Walsingham 1901. Its male organ is distinguished by the long and bent dorsal appendage, just extending to the point of origin of the also long and thin costal appendage. There is no other similarly constructed species; albicanella Z., has a differently shaped dorsal appendage. Gen. prep. 3 Symmoca, made by T a m s of the type (fig. 8: H).

Thanatovena gen. n.

Head with hairs loosely forward; labial palpi recurved, ascending, second joint compact with hairs, tuft very small, third joint pointed; antennae rather thick, smooth. Fore wing evenly tapering to a point. Venation: r_1 from before middle of cell, r_{4+5} on a medium long stalk, r_5 to apex, m_1 near it, m_2 removed, grouped with the rest of the veins around lower angle of cell, $m_3 + cu_1$ on a short stalk, cu_2 arched, free. Hind wing as broad as second, slowly tapering to a blunt tip. Venation: $rr + m_1$ coincident to a very short stalk, below apex, m_2 far removed, end of cell between it and conascent m_3 , cu_1 . Nearest to *Neospastus* Gozm., with the above differences (fig. 2: E).

Generotype: aegrella Wlsghm.

aegrella Walsingham 1908. Its male organ is characterized by the arched valva and costal appendage almost meeting, as by the smallheaded dorsal appendage with its broad base. *Molitor* Wlsghm., *olympi* Gozm., *vetustella* Zerny, and the *Apiletria*-group has differently shaped appendages. Gen. prep. 1. *Symmoca*, made by T a m s of the type (fig. 8: I).

Nastocerella Fletcher 1939 (= Nastoceras Chrétien 1922)

Head with hairs smoothly forward; labial palpi porrect to ascending, second joint with appressed hairs, third joint pointed; antennae very thick, smooth. Fore wing evenly tapering to a blunt tip. Venation as in Symmoca Hbn., but r_{4+5} on a long stalk, r_5 just below apex. Hind wing as broad as fore wing, with a blunt apex. Venation: as in Symmoca Hbn.

Generotype: colluella Chrét.

This genus, though closely related to *Symmoca* Hbn, as regards its venation and the structure of the genital organ of its species, is a very valid genus indeed, representing one of the transitions to the *Lecithocera*-group owing to its thickened antennae.

I did not see *colluella* Chrét.

candidella Chrétien 1922. Its male organ is distinguished by the basic signella-pattern, with its long and recurved dorsal and long straight costal appendages. Gen. prep. 12 Symmoca, made by T a m s of the type (fig. 8: J).

Apiletria Lederer 1855.

Head compactly haired anteriorly; labial palpi large, from porrect to ascending, second joint with large and stiff hairs, compact (not a tuft!), third joint pointed; antennae long. Fore wing tapering to a point. Venation: as in *Conquassata* Gozm., but cell evenly broadening. Hind wing as broad as second, tapering. Venation: as in *Symmoca* Hbn., cell long, pointed.

Generotype: luella Led.

This genus must be separated from *Oecophoridae*, since, among other factors, the veins $rr + m_1$ of the hind wings are stalked, and not parallel. Also, its general aspect refers it to the vicinity of *Symmoca* Hbn., whilst the male genital structure makes it a closely related group. The coloration, and general appearance of the animals also bespeak a Symmocoid aspect.

luella Lederer 1855. I have examined specimens of this species, as also those of nervosa Stainton 1867 and purulentella Stainton 1867. Though the animals show rather good distinguishing characters in their externals, I have not been able to find any differences in their male genital organs! This is the more surprising, since I know of no case in the whole Lecithocerinae subfamily of two species with similar male organs as is the case in some of the other Gelechiid subfamilies. One is compulsed to take the view that all three species are but

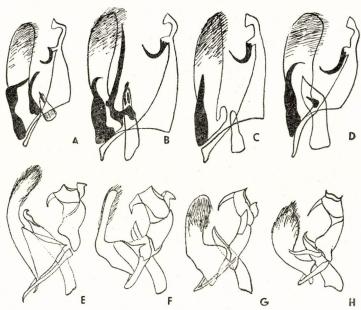


Fig. 9. — Male genital organs. A: Symmoca homalodoxa Meyr., B: Apiletria luella Led., C: Nestorellus Meyricki Geras., D: Conquassata syriacella Rag., E: E. funebrella Chrét. (= umbrinella Zy.), F: Exorgana Rungsi Lucas, G: E. iranica sp. n., H: E. monochromella Rbl.

one, and show a strong trend of subspecification, — or they are valid species indeed with no trace of specific differences found in the male apparatus as yet. In the lack of a large material or of distribution etc. data, I cannot decide this question. Gen. prep. 946, *luella* Led., Syria, leg. Stgr., coll. Eppelsheim, coll. Krone; (fig. 9: A), 847, *purulentella* Stt., Jericho, Palestina, 30. IV. 1930, leg. Amsel; 948, *nervosa* Stt., Cyrenaica, Bengasi, 6. V. 1922, leg. Krüger, coll. Amsel.

Nestorellus Gerasimov 1930.

Head with haire loosely forward; (labial palpi broken away on the specimen I examined), antennae smooth but rather thick. Fore wing long, rather narrow, tapering to a point. Venation: as in *Conquassata* Gozm., r_5 just below apex. Hind wing as broad as fore wing, tapering to a blunt point. Venation: as in *Symmoca* Hbn., but m_{3+} cu₁ on a short stalk (fig. 2:G).

Though the external appearance is dissimilar to the species comprising the Symmocoid groups, the venation and the structure of the male genital organ refers this genus also into their close vicinity. Though the male organ shows a distinct agreement with the general Symmocoid structure, the thickening anten-

nae mean and indicate a transition to the Lecithocera groups.

Meyricki Gerasimov 1930. The male organ shows the recurrent structure of the species Donaspastus mediterraneus Gozm., and Conquassata costobscurella Amsel. None of these have any relationship with this species, their pattern, coloration and venation are utterly different. Gen. prep. 949, Kizilca, Guzars Buchara, 1. V. 1926, leg. Gerasimov, paratype, coll. Amsel (fig. 9: B,

Exorgana gen. n.

Head with hairs loosely forward; labial palpi relatively large, recurved, ascending, second joint with compact, thickening hairs, third joint long, pointed; antennae strongly and evenly ciliated. Fore wing elongated, tapering to a point. Venation: r_1 from 1/5 of cell, r_2 , $_3$, $_4$ + $_5$ equidistant, r_4 + $_5$ on a long stalk, r_5 to termen, all other veins from equidistant sources. Hind wing as broad as fore wing, blunt. Venation: $r_1 + m_1$ on a medium long stalk, m_2 between it and the

shortly stalked $m_3 + cu_1$, cu_2 removed (fig. 2 : F).

Nearest to Leviptera Janse, but this has r_5 to apex and cubitals on a stalk. Homaloxestis Meyr. has r_3 also on the common stalk of r_{4+5} on the fore wings; whilst Atrichozancla Janse lacks m_2 on the hind wings. (I could not examine Neocorodes Meyrick). Genitally, the new taxon belongs to the Lecithocera—Leviptera—Homaloxestis—Eridachtha—Cophomantella—Protolychnis—Atrichozancla—Plagiocrossa—etc. groups, and thus into a very distinct family, the Timyridae Clarke 1955., characterized by the beak-like gnathos fused to the top of the uncus.

Generotype: iranica sp. n.

iranica sp. n. Alar exp.: 18 mm (male), 16 mm (female). Head, scapulae, thorax, labial palpi and abdomen, together with fore wing, of an earthen brown color with some grey. Its pattern consists of a dark dot at end of cell, with some dark scales also on veins in apical area. Ciliae a lighter brown. Hind wing greyish-brown.

Nearest Rungsi Lucas, which is, however, much lighter, having a light yellowish-brown color. Its male organ has a broad, medium long and strongly bent valva; aedeagus smooth, slender (fig. 9: G). Gen. prep. 127, Poin Schahkuch, Nord Persien, VII. 98, Funke; in Rebel's fist: "n. gen. Symmoca, n. sp. Palpen!"

The female is smaller, of pure white fore wings, with some dark brown scales along termen and scattered in apical area. No discernible pattern. Hind wing white. Rest of body a dusty white. Label: Poin Schahkuch, Nord Persien, VI. 98. Funke. Holotype male and allotype female in the Collection of the

Hungarian Natural History Museum.

funebrella Chrétien 1922 (= umbrinella Zerny 1936, gen. prep. 112, Marokko, Gr. Atlas, Tachdirt, 2200—2700 m, 2—10. VII. 1933, leg. Zerny, lectoholotype). Its male organ distinguished by the very long, evenly arched and rather narrow valva; aedeagus with a hook. Gen. prep. 13 *Symmoca*, made by Tams of the holotype (fig. 9: E).

monochromella Rebel 1902. Its male organ has a short, pointed and yet rather spatulate valva, its dorsum evenly arched; aedeagus with a pointed and recurved tip. Gen. prep, 110, Anatolia, Ak-Chehir, 1900, leg. Korb, lectoholotype (fig. 9: H).

Rungsi Lucas 1937. Its male organ has a very narrow and long valva; aedeagus broad, long. Gen. prep, 13 Symmoca, made by T a m s of the holotype; also gen. prep. 94, Maroc, (Atlas), Ifrane, 1650 m, Juillet 1936, CH. R u n g s

legit, coll. Museum Paris (fig. 9: F).

Of the species formerly relageted to *Symmoca* Hbn., I have been able yet to examine and as a result, to pass them to other genera or families, the following ones:

indistinctella Rebel 1902 (gen. prep. 522, Castilia, VIII. 1886, leg. Staudinger, No. 105, lectotype) belongs to the generic group, "Borkhausenia Hbn."

mendosella Zeller 1868 (gen. prep. 90, Alpes Carni, Passe Predile, 1150 m,

10. VII. 1938, leg. Schmidt) is also a "Borkhausenia Hbn."

multilineatella Lucas 1932 (gen. prep. 3012, made by Viette of the holotype) is, according to its male genital organ, a true *Stomopteryx* Hein., well fitting among the African *Stomopteryx* species with their mostly streaky and conspicuous pattern.

rosmarinella Walsingham 1901 is a Blastobasis Z.

I was not able to examine the following "Symmoca" species of Turati: achromatella, costimacula, desertella, deserticolella, gracilella; and the following ones of Caradja: contristella, minimella, paracedestiella, tristella, turana. The type of griseosericeella Ragonot 1879 has no abdomen (I could not get any of the 4 paratypes in Caradja's collection); Helleri Rebel 1910 and Husadeli Rebel 1910 is not to be found in the Hofmuseum in Vienna; quinquepunctella Chrétien 1922 is a female and is in Rabat, Marocco, and I could not examine it. Stoechadella Constant 1884 is nothing else but Blastobasis anthrophaga Staudinger 1870.